

Addressing Lead-Based Paint Hazards During Renovation, Remodeling, and Rehabilitation in Federally Owned and Assisted Housing

Module 1

MODULE 1 EXERCISE

Objective: Identify common work practices that produce a lot of dust and debris.

Length: Total Time: 20 minutes.

Directions: In groups of 3 to 5 take 10 minutes to answer the questions below. Assign one person to report your group's answers to the rest of the class.

1. Rank the work practice descriptions according to the amount of dust and paint chips you think they make. In the table below, under the column labeled Rank, write:
 - 1 next to the work practice that makes the most dust and debris.
 - 2 next to the work practice that makes the second most amount of dust and debris.
 - 3 next to the work practice that makes the third most amount of dust and debris.
 - Continue until you have ranked each work practice according to how much dust and debris you think it will make. A smaller number means that you think the work practice will create more dust or debris than a larger number.

If you think that some work practices make about the same amount of dust or debris you can give them the same rank. If you think that each practice makes different amounts of dust, rank them from 1 to 7.

Work Practice Description	Rank
A. Using a power sander with no vacuum attachment to remove interior paint from a plaster wall.	
B. Hand sanding a small (less than 2 square feet) area for surface preparation on an interior room where the paint is in good condition.	
C. Ripping out old kitchen cabinets in a 50 year-old house where the paint on the walls and cabinets is in good condition (e.g., it is not peeling or flaking).	
D. Repairing a sticking window. Loosen the painted sashes, remove inside stop molding, remove top and bottom sash, use a power planer to remove old paint, reglaze and repair the sash as necessary, repair and paint the jamb, reinstall the sash.	
E. Removing old carpeting placed over a hardwood floor in one room.	
F. Demolishing one interior wall using hand or power tools.	
G. High pressure power washing or hydro blasting exterior paint.	

2. For the work practice(s) that you ranked #1 (it makes the most dust and debris), tell why you think it makes the most dust and debris.

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3. For the work practice(s) that you ranked last (it makes the least amount of dust and debris) tell why you think it makes the least amount of dust and debris.
4. If you actually did any of the jobs described above, what would you do to clean up when the job was finished?

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Module 3

MODULE 3 EXERCISE

Objective: Review set-up methods to contain lead dust and allow for easier clean-up.

Length: 30 minutes, including discussion of answers

Directions: In groups of three or four take 20 minutes to review the three illustrations below and:

- Identify three set-up methods that encourage the *spread* of lead-contaminated dust and debris beyond the work area;
- Identify three techniques that could be used to *reduce* the spread of lead-contaminated dust and debris to non-work areas;
- Assign one person to report your group's answers to the rest of the class.

Illustration 1



Increase the Spread of Dust and Debris

Reduce the Spread of Dust and Debris

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Illustration 2



Increase the Spread of Dust and Debris

Reduce the Spread of Dust and Debris

Illustration 3



Increase the Spread of Dust and Debris

Reduce the Spread of Dust and Debris

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Module 4

MODULE 4 EXERCISE 4A

Objective: Identify safe work practices for typical renovation, remodeling, and rehabilitation tasks.

Length: Total time: 25 minutes

Directions: Take 5 minutes to read the background and the jobs below. When you are finished, the instructor will ask you and the other students to contribute approaches to each of the jobs listed below. You may take notes on approaches under each description.

Background:

You have been asked to plan renovation work on a Victorian style home built around 1910. You are looking forward to doing a lead-safe, high quality job and getting a good reference. This represents at least three solid weeks of work for your workers. To be safe, you have advised the owners that you assume some layers of paint are lead-based paint. You reassure them that you will take steps to reduce the risk of creating a lead hazard.

The Jobs

How will you approach each of the following jobs in a lead safe way?

1. Remove worn green carpet from vestibule, first floor hallway, and staircase. The carpet is tacked to the floor and its edges are covered with quarter round at all of the walls. The carpet is being removed to expose hardwood flooring which is to be refinished.
2. Enlarge the door size opening in the wall between the living and dining rooms to make way for an enlarged passageway. There is trim at the base of the walls and trim at the top and sides of the opening. As much of the trim as possible should be saved to be reused on the enlarged opening. The new opening will be as tall as before but wider.

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3. Remove the old painted wooden cabinets in the kitchen. These built-in cabinets line two walls in the kitchen. The walls will be repainted and new cabinets installed.

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MODULE 4 EXERCISE 4B

Objectives: The objective of this exercise is fourfold:

- To evaluate a project's potential to create lead dust and plan your work to minimize the creation and dispersion of this dust.
- To familiarize yourself with the worksheets included in this module and use them to evaluate a potential scenario.
- To discuss ways to talk to clients about lead safe work practices and ensure they are informed about the dangers of lead dust.
- To ensure you understand your requirements related to disseminating information related to lead-based paint.

Length: Total Time: 35 minutes - 20 minutes working in groups and 15 minutes discussion

Directions: The following exercise presents a scenario that may be similar to situations routinely encountered by you or your company. In groups of three to five (depending on class size), take the next 20 minutes to read over the scenario and answer the questions on the next two pages. Before answering the questions, however, complete the attached worksheet. If you need to make assumptions in order to complete the questions or the worksheet, please be sure to write down your assumptions and include them in your worksheet and answers.

Background

New property owners have contracted with your company to perform major remodeling work throughout a house constructed in the 1950's. On the main floor, the work consists of remodeling the kitchen (existing dimensions are 12' x 15') and adding a new 15' x 15' sunroom off of the kitchen. This remodeling work includes tearing out existing cabinets, flooring, and a painted wall. Upstairs, the residents have asked you to renovate the half-bath by removing the existing linoleum flooring and sink (porcelain sink attached to the wall with plumbing beneath exposed) and then laying new floor tiles and installing a new sink and cabinet unit. To the best of the residents' knowledge, no major renovation, remodeling and rehabilitation work has been done on the house since it was constructed and the former residents never mentioned lead-based paint.

Although the house is currently vacant, the new owners are planning on moving into the house in the very near future. It is highly likely that they will move in before all of the renovation work has been completed. The new owners are a couple in their early thirties with two children under the age of six, and two pet cats that are kept indoors.

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Complete the attached worksheet based on the information provided in the scenario. After completing the worksheet, answer the following questions. At the end of the exercise, you may be asked to share your answers with the class. Be prepared to explain your answers.

1. Was the property constructed prior to 1978 and do you have to utilize lead safe work practices?
2. Is this a high dust job? If yes, what work activities in this job are likely to create high dust levels? What special precautions should you take to minimize the hazards associated with high levels of lead dust?
3. How would you schedule the work? When would you perform lead safe work practices in relation to the other renovation, remodeling, and rehabilitation work? Why?

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MODULE 4 EXERCISE 4B

4. How did you develop your cost and labor estimates? Will any special tools or equipment be needed for this job?

The following questions pertain to talking to the residents.

5. What topics, related to lead dust and lead safe work practices, should you highlight when discussing the job with the residents? Where could you refer the residents if they ask for additional information?

6. After discussing the potential lead dust hazards and the associated lead safe work practices with the residents, they insist that these actions are not necessary because the house does not contain any lead-based paint. How do you respond?

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WORKSHEET: EVALUATING THE JOB

1. Was the property constructed prior to 1978? or, If the work area is limited to an addition, was the addition constructed prior to 1978?	Yes_____ No_____
✓ If no, you are <u>not</u> required to perform lead safe work practices.	Yes_____ No_____
✓ Do you have documentation that the work area has been designed as lead-free by a certified inspector or risk assessor?	Yes_____ No_____
2. Will this work disturb painted surfaces or otherwise create or disturb dust that may contain lead?	
✓ Is this a high dust job? If yes, you must take added precautions.	Yes_____ No_____
3. How will the lead activities affect my job?	
✓ How much additional time will lead-safe work practices take? See calculation aid on back.	Set up _____hours
✓ How much will these practices cost? See checklist of tools and materials on back	Work _____hours
	Cleanup _____hours
	Labor \$_____
	Supplies \$_____
4. What activities should the residents perform before I begin my lead-safe work practices?	
✓ Examples include removing draperies, small furniture, and other fixtures from the work area.	Talk to the resident about specific activities
5. Other job related notes	

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CHECKLIST: MATERIALS AND SUPPLIES

Set up and Basic Tools

- | | | |
|---|---|---|
| <input type="checkbox"/> Protective clothing, coveralls | <input type="checkbox"/> Duct or masking tape | <input type="checkbox"/> Chemical stripper (avoid methylene chloride) |
| <input type="checkbox"/> Disposable shoe covers | <input type="checkbox"/> 4-6 mm polyethylene sheeting | <input type="checkbox"/> Window opening tool |
| <input type="checkbox"/> N100 Dust Mask | <input type="checkbox"/> Utility knife | <input type="checkbox"/> Plane |
| <input type="checkbox"/> Painter's hats | <input type="checkbox"/> Rope or other barrier | <input type="checkbox"/> Heat gun |
| <input type="checkbox"/> Paint scraper | <input type="checkbox"/> Misting bottle | <input type="checkbox"/> Disposable hand towels |

Specialized Tools - Hepa Filters

- | | | |
|---|---|--|
| <input type="checkbox"/> Needle gun with HEPA exhaust | <input type="checkbox"/> HEPA exhaust attachments for power tools (sanders, grinders, planers, shavers) | <input type="checkbox"/> Power washing equipment |
|---|---|--|

Clean up Supplies

- | | | |
|--|---|--|
| <input type="checkbox"/> Two-sided bucket | <input type="checkbox"/> Misting bottle | <input type="checkbox"/> Heavy-duty garbage bags |
| <input type="checkbox"/> 3-4 disposable mop heads and mop handle | <input type="checkbox"/> General or lead-specific Cleaning solution | <input type="checkbox"/> Duct-tape |
| <input type="checkbox"/> HEPA filtered vacuum | <input type="checkbox"/> Disposable hand towels | <input type="checkbox"/> Shovel and rake |

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Hours and Cost Calculation

	Set up	Work	Clean up	Total
Labor Hours (total)				
Labor Cost (total)	\$	\$	\$	\$
Supplies	\$	\$	\$	\$
Total	\$	\$	\$	\$

RESOURCES FOR ADDITIONAL INFORMATION

Where can I get copies of the *Protect Your Family From Lead in Your Home* pamphlet?

Download electronic copies at: www.epa.gov/lead

- ✓ Use camera-ready copies from the National Lead Information Center to reproduce the pamphlet, providing that you reproduce the text and graphics in full: 1-(800) 424-LEAD (5323).
- ✓ Order bulk copies from the Government Printing Office (GPO) which cost \$26.00 for a package of 50 pamphlets: (202) 512-1800; refer to the pamphlet by name or by GPO Stock Number 055-000-00507-9.

Where can I get copies of *The Lead-Based Paint Pre-Renovation Education Rule* handbook?

Download electronic copies of the interim edition (June 1999) in PDF format at <http://www.epa.gov/opptintr/lead/interior2.pdf>

- ✓ Contact the National Lead Information Center at: 1-(800) 424-LEAD (5323)

Where can I find additional information and resources related to lead-based paint?

- ✓ National Lead Information Center: 1-800-424-LEAD (5323)
- ✓ EPA's Office of Pollution Prevention and Toxics (OPPT): www.epa.gov/lead, 202-260-3810
- ✓ HUD's Office of Healthy Homes and Lead Hazard Control: www.hud.gov/offices/lead, 202-755-1785, ext. 104.